

Claims:

1. A fibrous mat, the major portion being non-cellulosic fibers and the uncoated Frazier air permeability being greater than about 50, having a coating comprising a filler and a binder on a surface of the mat, the coating having an exposed surface smoothness Ra of no more than about 15 microns.
2. The mat of claim 1 wherein the coating comprises a minor amount of clay, a minor amount of polymeric binder and a major amount of filler.
3. The mat of claim 1 wherein the coating comprises about 10 to about 20 wt. percent clay, about 5 to about 15 wt. percent polymeric binder and about 65 to about 85 wt. percent filler.
4. The mat of claim 3 wherein the coating comprises kaolin clay and limestone.
5. The mat of claim 4 wherein kaolin is present in an amount of about 12 to about 18 wt. percent and limestone is present in an amount of about 70 to about 80 wt. percent.
6. The mat of claim 1 wherein the fibrous mat has an uncoated air permeability of at least about 175 and the coating has an exposed surface smoothness of no more than about 15.
7. A fibrous nonwoven mat comprising glass fibers at least about 0.25 inch long having an average diameter of at least about 10 microns and a cured polymeric binder, said mat prior to coating having a Frazier air permeability of at least about 175, said mat having a coating on a surface of the mat, the coating having an exposed surface with a smoothness Ra of no more than about 15 microns, the coating comprising a filler.
8. The mat of claim 1 wherein the coating comprises a minor amount of clay, a minor amount of polymeric binder and a major amount of filler.

9. The mat of claim 7 wherein the coating comprises a minor amount of clay, a minor amount of polymeric binder and a major amount of filler.

10. The mat of claim 1 wherein the coating comprises about 10 to about 20 wt. percent clay, about 5 to about 15 wt. percent polymeric binder and about 65 to about 85 wt. percent filler.

11. The mat of claim 7 wherein the coating comprises about 10 to about 20 wt. percent clay, about 5 to about 15 wt. percent polymeric binder and about 65 to about 85 wt. percent filler.

12. The mat of claim 3 wherein the coating comprises kaolin clay and limestone.

13. The mat of claim 4 wherein kaolin is present in an amount of about 12 to about 18 wt. percent and limestone is present in an amount of about 70 to about 80 wt. percent.

14. A method of coating a fibrous mat substrate, the mat substrate prior to coating being comprised of a major portion of non-cellulosic fibers and having a Frazier permeability of greater than about 50, the coating containing one or more of clay, polymeric binder and other fillers, comprising applying a layer of wet coating slurry onto a surface of the mat substrate, bringing the exposed surface of the wet coating into contact with a smooth surface and maintaining the exposed surface of the coating in contact with the smooth surface while at least partially drying the coating to produce a coated mat having a surface smoothness on the exposed surface of the coating, when dry, of an Ra no greater than about 15 microns.

15. The method of claim 15 wherein the Frazier permeability of the fibrous mat prior to coating is greater than about 175 and wherein the coating comprises a minor amount of clay, a minor amount of polymeric binder and a major amount of filler.

16. The method of claim 15 wherein the coating comprises about 10 to about 20 wt. percent clay, about 5 to about 15 wt. percent polymeric binder and about 65 to about 85 wt. percent filler.

17. The method of claim 17 wherein the coating comprises a kaolinitic clay and limestone.

18. The method of claim 18 wherein kaolin is present in an amount of about 12 to about 18 wt. percent and limestone is present in an amount of about 70 to about 80 wt. percent.

19. A method of making a coated fibrous mat by coating a mat substrate, the mat substrate prior to coating comprised of a major portion of non-cellulosic fibers and having a Frazier permeability of greater than about 50, the coating containing one or more of clay, polymeric binder and other fillers, comprising applying a layer of wet coating slurry onto a smooth surface, bringing the mat substrate into contact with the layer of coating to form a wet coated mat and maintaining the exposed surface of the coating in contact with the smooth surface while at least partially drying the coating to produce a coated mat having a surface smoothness on the exposed surface of the coating, when dry, of an Ra of no greater than about 15 microns.

20. The method of claim 20 wherein the Frazier permeability of the fibrous mat prior to coating is greater than about 175 and wherein the coating comprises a minor amount of clay, a minor amount of polymeric binder and a major amount of filler.

21. The method of claim 20 wherein the coating comprises about 10 to about 20 wt. percent clay, about 5 to about 15 wt. percent polymeric binder and about 65 to about 85 wt. percent filler.

22. The method of claim 22 wherein the coating comprises kaolinitic clay and limestone.

23. The method of claim 23 wherein kaolin is present in an amount of about 12 to about 18 wt. percent and limestone is present in an amount of about 70 to about 80 wt. percent.

24. A laminate comprising a first layer bonded to a second layer comprising a fibrous mat containing a major portion of non-cellulosic fibers having an average fiber diameter of at least about 10 microns, the fibrous mat having a coating on a surface, the coating having an exposed surface having a surface smoothness Ra of no greater than about 15 microns, the coating comprising a filler.

25. The laminate of claim 25 wherein the coating comprises a minor amount of clay, a minor amount of polymeric binder and a major amount of filler.

26. The laminate of claim 25 wherein the coating comprises about 10 to about 20 wt. percent clay, about 5 to about 15 wt. percent polymeric binder and about 65 to about 85 wt. percent filler.

27. The laminate of claim 26 wherein the coating comprises kaolin clay and limestone.

28. The laminate of claim 7 wherein kaolin is present in an amount of about 12 to about 18 wt. percent and limestone is present in an amount of about 70 to about 80 wt. percent.

29. The laminate of claim 25 wherein the fibrous mat is a nonwoven mat comprising glass fibers and a cured polymeric binder bonding the fibers together.

30. The laminate of claim 31 wherein the glass fibers have an average diameter of at least about 11 microns.

31. The coated mat of claim 1 wherein the exposed surface of the dry coating has an Ra of no greater than about 13 microns.

32. The coated mat of claim 1 wherein the exposed surface of the dry coating has an Ra of no greater than about 10 microns.

33. The coated mat of claim 7 wherein the exposed surface of the dry coating has an Ra of no greater than about 13 microns.

34. The coated mat of claim 7 wherein the exposed surface of the dry coating has an Ra of no greater than about 10 microns.

35. The coated mat of claim 15 wherein the exposed surface of the dry coating has an Ra of no greater than about 13 microns.

36. The coated mat of claim 15 wherein the exposed surface of the dry coating has an Ra of no greater than about 10 microns.

37. The coated mat of claim 20 wherein the exposed surface of the dry coating has an Ra of no greater than about 13 microns.

38. The coated mat of claim 20 wherein the exposed surface of the dry coating has an Ra of no greater than about 10 microns.

39. The coated mat of claim 25 wherein the exposed surface of the dry coating has an Ra of no greater than about 13 microns.

40. The coated mat of claim 25 wherein the exposed surface of the dry coating has an Ra of no greater than about 10 microns.